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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/864,360	05/23/2001	James Allen Clark	2705-167	4571

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EXAMINER

SHANG, ANNAN Q

ART UNIT	PAPER NUMBER
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2623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/04/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/864,360

Applicant(s)

CLARK ET AL.

Examiner

Annan Q. Shang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-12,14-16 and 18-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12,14-16 and 18-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments/amendment with respect to claims 1-7 and 22-30 have been considered but are moot in view of the new ground(s) of rejection. The amendment to the independent claims 1, 22 and 26 necessitated the new ground(s) of rejection discussed below.

With respect to claims 9-11, 14,15, 18-31 and 40 rejected under 35 U.S.C. 102(e) as being anticipated by **Seidman et al (6,298,482)**, claims 12 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over **Seidman et al (6,298,482)** in view of **Zintel (6,779,004)** and claims 32-39 rejected under 35 U.S.C. 103(a) as being unpatentable over **Seidman et al (6,298,482)** in view of **Teich (6,088,826)**, applicant's arguments are not persuasive. Applicant argues that Seidman does not teach the amended/unamended claims limitations, i.e., "...detecting services available information, the services available information indicating an availability of services at the network termination unit, and transmit the services available information in the use pattern packets" that "...functional limitations must be evaluated and considered..." that "...a network termination unit, receives or decodes use pattern packets..." that "...a processor in the head end is not described as monitoring services available information..." that "...nothing teaches or suggests that there is a processor or processing means operable to both analyze data from use pattern packets and monitor services available..." (see page labeled 9 of 16+ of applicant's Remarks)

In response, Examiner disagrees. Examiner notes applicant's arguments, however, Seidman discloses in col.7, line, 56-col.8, line 1+, that "...VRS historical reports contain a number of n of SHR's 80 in additional to basic profile information...(col.7, line 56-66), that "...variety of viewing session types to the user, for example, 'academic' viewing, where embedded data is critical 'entertainment'...filtering out by the microcontroller, depending on the viewer's history and interests. The embedded data is offered to the viewer by displaying of a 'hyperlink'...user selects a hyperlink for delivery of a unit of embedded data, selection history record (SHR)...col.8, lines 1-5, lines 23-27) and also VOD services (col.8, line 39-45). All these services, academic, entertainment, Internet, VOD, etc., are services available at the STB, generated in the SHR records, and transmitted to the head end (content analyzer) via a port at the STB and also at the head end, where the head end processor tracks availability of services at each STB and customizes various content or services to users of the STB. The head end inherently includes a processor or processing unit, which monitors and analyzes the use pattern packets with available services information from each STB to customizes services to the various STB based on the received use pattern information and user interest data, which includes service available information. Furthermore the use pattern packets and user interest data generated at each STB includes network packet header, and these packets are periodically transmitted to the HE, or transmitted to the HE based on instructions sent to the STB from the HE, where the HE identifies the payload of the packets and customizes and delivers to each STB,

various services or content based on the received information within the packets (col.6, line 53-col.7, line 55, line 56-col.8, line 11, line 60-col.9, line 16).

With respect the 103(a) rejection of claims 6, 12 and 16, Seidman discloses identifying use pattern packets from among other packets, but silent to using a content discovery protocol to uniquely identify packets from among other packets. However, this deficiency is disclosed in **Zintel** reference, which discloses the use of discovery protocol to uniquely identify packets from among other packets (col. 4, lines 56-65, col. 5, lines 49-56, col. 7, lines 17-26 and col. 46, line 33-46). Hence the rejection is proper, meets all the claim limitations and maintained.

With respect the 103(a) rejection of claims 32-39 Seidman teaches tracking reception of content signals by the NTU, determine if data of a particular service that should have been received by the NTU at a point in time was received by the NTU and verify a delivery of an advertisement to the NTU, but fails to explicitly teach where the processor tracks a QoS of service s provided to the NTU. However, **Teich** reference figures 1-2, discloses method for checking data for errors in data communication systems where a destination system performs various error detection of a payload or packet to achieve a QoS of packets received, tracking reception of packets, determining if packet should be received at a point in time, verifies the delivery of a particular packet and communicates to a source for retransmitting of the packet if necessary (col.3, line 20-col.4, line 34). Hence the rejection is proper, meets all the claim limitations and maintained. Applicant's amended/unamended claims do not overcome the prior arts of records, as discussed below. **This office action is made Final.**

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5, 7-11, 14, 15, 18-31 and 40 are rejected under 35 U.S.C. 102(e) as being anticipated by **Seidman et al (6,298,482)**.

As to claim 1, note the **Seidman** reference figures 1-6, discloses multimedia broadcast and interactive services, which monitors viewer selection histories and further discloses a network termination unit 'NTU' (Set-top box 'STB' 1), comprising:

A port (Input port 2) operable to receive content signals (col.6, lines 9-25);

A demodulator (4) operable to demodulate the content signals into demodulated content signals (col.6, lines 9-25);

A decoder (6 and 7) operable to decode the demodulate content signals into display signals (col.6, lines 9-25); and

A module (Microcontroller 'MC' 9) operable to monitor services available information, which indicates an availability of services at the network termination unit (STB-1), extract content or services available identifying data, (figs. 4-7, col.5, lines 6-

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22, lines 44-62 and col.6, lines 1-25) associated with a particular content or service signal of the content or service signals from that particular content or service signal;

Detect use patterns (MC-9) of a user viewing display signals on a viewing device (STB or TV Display), formatting (MC-9) data representative of the use patterns of services available information into network packets as payload data, setting a network packet header to identify the payload as a use patterns, forming a use pattern packets, and transmit the use patterns as use pattern packets, detect services available information, the services available information indicating an availability of services at the network termination unit, and transmit the services available information in the use pattern packets (col.6, line 53-col.7, line 55, line 56-col.8, line 45, col.10, lines 1-57), note that academic, entertainment, Internet, VOD, etc., are services available at the STB, generated in the SHR records, and transmitted to the Head end (HE, a content analyzer), which inherently includes a processor or processing unit for receiving SHR pattern packets from the STB-1, via a port, decoding the use pattern packets into data and where a processor analyzes the data to derive viewing information or user profile including services available information at each STB and customizes content or service to each STB based on these information.

As to claim 3, Seidman further discloses where the NTU comprises a cable modem (col.6, lines 9-25 and col.10, lines 41-57).

Claim 4 is met as previously discussed with respect to claim 1.

Claim 5 is met as previously discussed with respect to claim 1.

Claim 7 is met as previously discussed with respect to claim 1.

As to claim 9, the claimed "a content analyzer, comprising..." is composed of the same structural elements of previously rejected claim 1.

As to claim 10, Seidman further disclose where the content analyzer resides at the distribution hub (col. 45, line 34-col. 46, line 18 and line 43-col. 47, line 1+).

As to claim 11, Seidman further disclose where the content analyzer resides at the Head end (col.6, lines 1-8 and line 53-col.7, line 19).

Claim 14 is met as previously discussed with respect to claim 1.

As to claim 15, the claimed "a method of transmitting use patterns..." is composed of the same structural elements of previously rejected claim 1.

As to claims 18-20, Seidman further tracks video content, programs, advertisements, etc., delivery to 'NTU' (col.6, lines 1-8)

Claim 21 is met as previously discussed with respect to claim 1

As to claim 22, the claimed "a network termination unit, comprising..." is composed of the same structural elements of previously rejected claim 1.

Claim 23 is met as previously discussed with respect to claim 1.

Claim 24 is met as previously discussed with respect to claim 3.

Claim 25 is met as previously discussed with respect to claim 1.

As to claim 26, the claimed "a content analyzer, comprising..." is composed of the same structural elements of previously rejected claim 1.

Claim 27 is met as previously discussed with respect to claim 10.

Claim 28 is met as previously discussed with respect to claim 11.

Claim 29 is met as previously discussed with respect to claim 1.

As to claims 30-31, the claimed "an article containing machine-readable code..." is composed of the same structural elements of previously rejected claim 1.

As to claim 40, Seidman further discloses where the content identifying data is a transport stream identifier (col.10, lines 20-40 and line 58-col.11, line 23).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 12 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Seidman et al (6,298,482)** as applied to claims 1, 10 and 15 above, and in view of **Zintel (6,779,004)**.

As to claims 6, 12 and 16, Seidman fails to explicitly teach where the use pattern packets are identified as such using a content discovery protocol that uniquely identifies use pattern packets from among other packets.

However, note the **Zintel** reference disclose dynamic connectivity among distributed devices and services, where packets are identified using discovery protocol that uniquely identifies use pattern packets from among other packets (col. 4, lines 56-65, col. 5, lines 49-56, col. 7, lines 17-26 and col. 46, line 33-46).

Therefore it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Zintel into the system of Seidman in order to enable the client or the service provider to automatically find controlled devices and services.

6. Claims 32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Seidman et al (6,298,482)** as applied to claims 1 and 9 above, and in view of **Teich (6,088,826)**.

As to claims 32-35, Seidman, teaches tracking reception of content signals by the NTU, determine if data of a particular service that should have been received by the NTU at a point in time was received by the NTU and verify a delivery of an advertisement to the NTU, but fails to explicitly teach where the processor tracking a QoS of service s provided to the NTU,

However, not the **Teich** reference figures 1-2, discloses method for checking data for errors in data communication systems where a destination system performs various error detection of a payload or packet to achieve a QoS of packets received, tracking reception of packets, determining if packet should be received at a point in time, verifies the delivery of a particular packet and communicates to a source for retransmitting of the packet if necessary (col.3, line 20-col.4, line 34).

Therefore it would have been obvious to one of ordinary skill in the art to incorporate the teaching of Teich into the system of Seidman in order to process error free packets or valid packets and provide an efficiency system and furthermore to notify

the source of packets or contents which have been received to enable the source or service provide to acknowledge receipt of its services

Claims 36-39 are met as previously discussed with respect to claims 32-35.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Annan Q. Shang** whose telephone number is **571-272-7355**. The examiner can normally be reached on **700am-400pm**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Christopher S. Kelley** can be reached on **571-272-7331**. The fax phone

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number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the **Electronic Business Center (EBC) at 866-217-9197 (toll-free)**. If you would like assistance from a **USPTO Customer Service Representative** or access to the automated information system, call **800-786-9199 (IN USA OR CANADA) or 571-272-1000**.

A handwritten signature in black ink, appearing to read 'Annan Q. Shang', with a large circular flourish at the end.

Annan Q. Shang